

ELECTRICITY INDUSTRY ACT

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY
MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Power System Operation Procedure Commissioning and Testing

Commencement: This Market Procedure is to have effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

Version history

21 September 2006	Power System Operation Procedure (Market Procedure) for Commissioning and Testing
17 July 2009	System Management amended changes to the procedure resulting from Procedure Change Report PPCL 0009
23 June 2011	System Management amended changes to the procedure resulting from Procedure Change Report PPCL 0016

TABLE OF CONTENTS

1.	COMMISSIONING AND TESTING PROCEDURE.....	33
2.	RELATIONSHIP WITH MARKET RULES	33
3.	SCOPE.....	33
4.	ASSOCIATED PROCEDURES AND OPERATING STANDARDS	33
5.	COMMISSIONING TESTS FOR VERIFYING GENERATOR OUTPUT CAPABILITY ..	44
5.1	Market Participant to submit Commissioning Test plan	44
5.2	Draft Commissioning Test plan	55
5.3	Assessment and Approval of Commissioning Test plans	55
5.4	Update of Commissioning Test plan	66
5.5	Conducting Commissioning Tests on the Trading Day.....	66
5.6	Other Tests.....	66
5.7	Draft Equipment Test plan	77
5.8	Communication Protocol	77
Appendix I	Commissioning Test Plan Standard Form Template	87
Appendix II	Equipment Test Plan Standard Form Template	1140

1. COMMISSIONING AND TESTING PROCEDURE

The Power System Operation Procedure: Commissioning and Testing ('Procedure') details procedures that System Management and Market Participants must follow when planning and conducting tests on Generation and Load Curtailment Facilities.

2. RELATIONSHIP WITH MARKET RULES

1. This Procedure has been developed in accordance with, and should be read in conjunction with clause 3.21A of the Wholesale Electricity Market (WEM) Rules (Market Rules).
2. References to particular Market Rules within the Procedure in bold and square brackets **[MR XX]** are current as at ~~1 June 2009~~[13 December 2010](#). These references are included for convenience only, and are not part of this Procedure.
3. In performing its functions under the Market Rules, System Management may be required to disclose certain information to Market Participants. In selecting the information that may be disclosed, System Management will utilise best endeavours and act in good faith to disclose only the information reasonably required by the application of the Market Rules.

3. SCOPE

The Commissioning and Testing Procedure covers the following processes:

- a. the planning and implementation of Commissioning Tests for particular generation systems as stated in the Market Rules **[MR 3.21A]** that wish to verify their output capability; and
- b. testing plans to accommodate tests carried out under a Resource Plan.

[In accordance with the Market Rules **\[MR 3.21A.3\]** System Management may only approve a Commissioning Test for:](#)

- [a. an existing generating system that has undergone significant maintenance; or](#)
- [b. a new generating system that has yet to commence operation](#)

4. ASSOCIATED PROCEDURES AND OPERATING STANDARDS

The following Procedure is associated with this Commissioning and Testing Procedure.

- a. Power System Operation Procedure – Dispatch

5. COMMISSIONING TESTS FOR VERIFYING GENERATOR OUTPUT CAPABILITY

1. A generator Commissioning Test will be required when a Market Participant wishes to undertake ~~or has been directed by the IMO to undertake~~, a program of equipment testing aimed at testing ~~the ability the output capability~~ of a generating system to operate at different levels of output.
2. A Market Participant may only seek approval from System Management to conduct a Commissioning Test in circumstances outlined in the Market Rules.
3. Where the expression “significant maintenance” is used in [clause 3.21A.3 of the Market Rules](#) ~~[clause 3.21A.3]~~, System Management will interpret this concept as maintenance work which requires re-testing of the Facility to operate at a satisfactory level. [This interpretation will not be applied to any other Procedure, or clause within the Market Rules.](#)
4. System Management has discretion to vary the application of the above definition, consistent with the Market Rules, on a case by case basis.

5.1 Market Participant to submit Commissioning Test plan

1. ~~In the event that~~ A Market Participant wishing to seek permission from System Management to conduct a Commissioning Test **[MR 3.21A.3]**, ~~the Market Participant~~ must provide System Management with particular Commissioning Test plan information specified in section 5.2 [and Appendix I](#) of this Procedure.
2. Commissioning Test plans must be submitted to System Management in accordance with the Market Rules **[MR 3.21A.4]**. System Management will consider Commissioning Test plans submitted after the timing requirement provided in the Market Rules, but must notify the IMO of a breach of this timing requirement.
3. ~~System Management will advise Market Participants of contact details and modes of communication for the submission of Commissioning Test plans and vice versa in accordance with the communication protocol in section 5.8.~~
4. ~~A Market Participant must comply with the communication requirements set by System Management pursuant to section 5.1.3 of this Procedure.~~
5. ~~Market Participants must provide System Management with the communication details of the operating person(s) authorised to submit Commissioning Test plans for each of their facilities.~~
4. System Management may approve Commissioning Test plans [submitted](#) no later than 2 business days prior to the commencement of the Trading Day.
5. Prior to submitting a Commissioning Test plan, unless there is a conflicting prior agreement made with System Management, the Market Participant must use reasonable endeavours to contact System Management to discuss possible network conditions that might influence the Commissioning Test plan. System Management will use reasonable endeavours to provide what assistance it can to assist the Market Participant.

~~8. Prior to submitting a written request for approval of a Commissioning Test plan, the Market Participant must use their best endeavours to inform System Management via telephone that the request relates to a Commissioning Test plan rather than an outage request.~~

6. Where a Market Participant no longer wishes to conduct a Commissioning Test, it must contact System Management and within the timeframe specified under the Market Rules **[MR 3.21A.6]**.

5.2 Draft Commissioning Test plan

1. In order to satisfy the Market Rules **[MR 3.21A.4]**, a Market Participant must provide a Commissioning Test Plan which includes all information set out in Appendix I of this Procedure.

2. System Management may publish on its external website from time to time a standard form Commissioning Test Plan which is consistent with section 5.2(1) of this Procedure.

3. A Market Participant must comply with the standard form Commissioning Test Plan where published by System Management and submit it in a manner determined by System Management under section 5.8.

4. System Management may vary the requirements set out in Appendix I of this Procedure for a particular Market Participant as required by the circumstances.

5.3 Assessment and Approval of Commissioning Test plans

1. The requirements that System Management must follow when assessing and approving Commissioning Test plans are specified in the Market Rules **[MR 3.21A]**. System Management must not show bias towards a Market Participant when scheduling Commissioning Tests **[MR 3.21A.8]**.

2. Where, in the opinion of System Management, requires additional information is required to make a suitable assessment of a draft Commissioning Test plan, System Management will request such information from the Market Participant and the Market Participant must provide the information as soon as practicable or within a timeframe requested by System Management.

~~3. System Management must not accept a Commissioning Test for a new generating system that is yet to commence operation which has a Commissioning Test period greater than the time period stipulated in the Market Rules. **[MR 3.21A.7(c)]**~~

4. Where, following approval of a Commissioning Test, System Management becomes aware of a relevant change in circumstances described in the Market Rules, System Management must notify the Market Participant accordingly **[MR 3.21A.11]**.

5. At any stage where a Market Participant becomes aware of conditions which may prevent the generating Facility from conforming to the approved Commissioning Test plan **[MR 3.21A.13]**, it must provide amended plans in

accordance with [Appendix I](#) this Procedure to System Management for approval as soon as practicable.

6. Where a Commissioning Test plan has not been approved System Management must provide an explanation for its decision in accordance with the Market Rules **[MR 3.21A.10(a)]**. The Market Participant may then submit a new Commissioning Test plan which should take into account the explanation provided by System Management.

5.4 Update of Commissioning Test plan

A Market Participant must update System Management regarding proposed changes to Commissioning Test plans when they occur.

5.5 Conducting Commissioning Tests on the Trading Day

The requirements to which a Market Participant must conform when conducting Commissioning Test plans approved by System Management are specified in the Market Rules **[MR 3.21A.12]**.

~~2. System Management may prepare a communication protocol to apply between System Management and a Market Participant concerning a Commissioning Test.~~

~~3. A Market Participant must comply with the communication requirements established in the relevant communication protocol.~~

5.6 Other Tests

1. Testing which does not conform to the Commissioning Test requirements in the Market Rules must be [conducted](#) by way of Resource Plan or variation to the plant schedule [pursuant to initial facility testing to enable it to enter full commercial operation for the first time, or an approved Equipment Test \[MR 7.6A.2\(a\) and MR 3.21AA\]](#).

2. Where a Market Participant wishes System Management to use the process stipulated in Market Rules **[MR7.10.5A or MR3.21AA]**, the Market Participant must provide System Management with a testing plan [equivalent to which includes all information set out in Appendix I or Appendix II of the Procedure, respectively](#). ~~The Market Participant~~ ~~The Market Participant~~ ~~and~~ must specifically request that System Management exercise its powers under clause 7.10.5A [or approves an Equipment Test under clause 3.21AA](#).

~~3. System Management may vary the requirements set out in Appendix I for a particular Market Participant as required by the circumstances.~~

~~3.3. System Management will advise Market Participants of contact details and modes of communication for the submission of [the abovementioned commissioning testing plans and vice versa in accordance with the communication protocol in section 5.8](#).~~

~~5. A Market Participant must comply with the communication requirements set by System Management pursuant to section 5.6.4 of this Procedure.~~

6. System Management may prepare a communication protocol to apply between System Management and a Market Participant concerning a commissioning test being carried out on the Trading Day.
7. A Market Participant must comply with the communication requirements established in the relevant communication protocol.

5.7 Draft Equipment Test plan

1. In order to satisfy the Market Rules [MR 3.21AA], a Market Participant must provide a Equipment Test Plan which includes all information set out in Appendix II of this Procedure.
2. System Management may publish on its external website from time to time a standard form Equipment Test Plan which is consistent with 5.7(1) of this Procedure.
3. A Market Participant must comply with the standard form Equipment Test Plan where published by System Management and submit it in a manner determined by System Management under section 5.8.
4. System Management may vary the requirements set out in Appendix II of this Procedure for a particular Market Participant as required by the circumstances.

5.8 Communication Protocol

1. System Management may prepare a communication protocol to apply between System Management and a Market Participant concerning a Test mentioned in this procedure.
2. Where a communication protocol is prepared, System Management must publish this document on its external website.
3. A Market Participant must comply with the communication requirements established in the relevant communication protocol.

Appendix I Commissioning Test Plan Standard Form Template

COMMISSIONING TEST PROFORMA			
<i>Generator Details</i>			
Market Participant:			
Facility Designation:			
Contact Details:		Operational	Commercial
	Email		
	Mobile		
	Phone		
	Fax		
Fuel Types:	Fuel "1"	Fuel "2"	Fuel "3"
<i>Test Details</i>			
Test Period:	Start Time (dd/mm/yyyy HH:MM)		End Time (dd/mm/yyyy HH:MM)
Purpose of Test(s):			
System Under Test:			

Test Description

--	--

Contingency Plan(s):

--	--

Timelines

Day (dd/mm/yyyy)	Net Output		Fuel Mix "1", "2", "3", "1&2", "1&3", "2&3", or All	Trip Risk Low, Medium, or High	Specific Tests			
	MW Active Power	MVAr Reactive Power			Technical Rule, Table A11.1	Technical Rule, Table A11.2	(other specify)	(other specify)
8:00								
8:30								
9:00								
9:30								
10:00								
10:30								
11:00								
11:30								
12:00								
12:30								
13:00								
13:30								
14:00								
14:30								
15:00								
15:30								
16:00								
16:30								
17:00								
17:30								
18:00								

	18:30							
	19:00							
	19:30							
	20:00							
	20:30							
	21:00							
	21:30							
	22:00							
	22:30							
	23:00							
	23:30							
	0:00							
	0:30							
	1:00							
	1:30							
	2:00							
	2:30							
	3:00							
	3:30							
	4:00							
	4:30							
	5:00							
	5:30							
	6:00							
	6:30							
	7:00							
	7:30							

|

Appendix II Equipment Test Plan Standard Form Template

GENERATION EQUIPMENT TEST PROFORMA			
<i>Generator Details</i>			
Market Participant:	<input style="width: 100%;" type="text"/>		
Facility Designation:	<input style="width: 100%;" type="text"/>		
Contact Details:		Operational	Commercial
	Email	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
	Mobile	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
	Phone	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
	Fax	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Fuel Types:	Fuel "1"	Fuel "2"	Fuel "3"
	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Associated MPI Request No.:	<input style="width: 100%;" type="text"/>		
<i>Test Details</i>			
Test Period:	Start Time (dd/mm/yyyy HH:MM)	End Time (dd/mm/yyyy HH:MM)	
	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	
Purpose of Test(s):	<input style="width: 100%; height: 80px;" type="text"/>		
System Under Test:	<input style="width: 100%; height: 40px;" type="text"/>		

Test Description

--

Contingency Plan(s):

--

Timelines

Day (dd/mm/yyyy)	Net Output		Fuel Mix "1", "2", "3", "1&2", "1&3", "2&3", or All	Trip Risk Low, Medium, or High	Test Descriptions			
	MW Active Power	MVAR Reactive Power						
8:00								
8:30								
9:00								
9:30								
10:00								
10:30								
11:00								
11:30								
12:00								
12:30								
13:00								
13:30								
14:00								
14:30								
15:00								
15:30								
16:00								
16:30								
17:00								

	17:30							
	18:00							
	18:30							
	19:00							
	19:30							
	20:00							
	20:30							
	21:00							
	21:30							
	22:00							
	22:30							
	23:00							
	23:30							
	0:00							
	0:30							
	1:00							
	1:30							
	2:00							
	2:30							
	3:00							
	3:30							
	4:00							
	4:30							
	5:00							
	5:30							
	6:00							
	6:30							
	7:00							
	7:30							